



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

August 31, 2006

H.R. 5695 **Chemical Facility Anti-Terrorism Act of 2006**

As ordered reported by the House Committee on Homeland Security on July 28, 2006

SUMMARY

H.R. 5695 would authorize the Department of Homeland Security (DHS) to regulate the security of chemical facilities across the United States. Under the bill, DHS would identify such facilities and estimate the level of risk they pose to the nation's security. DHS would develop regulations to require the owners and operators of those facilities to perform vulnerability assessments and to establish site security plans. The legislation would establish a chemical security office at DHS headquarters that would be responsible for overseeing the requirements under this legislation, including conducting audits and inspections of the nation's chemical facilities. In addition, DHS would be responsible for maintaining the information it receives on chemical facilities in a secure location. Finally, H.R. 5695 would require DHS to establish a program to train government officials and owners and operators of chemical facilities to inspect and evaluate chemical facilities and to oversee security and evacuation plans at those facilities.

CBO estimates that implementing H.R. 5695 would cost \$230 million over the next five years for DHS to regulate and oversee an estimated 15,000 to 18,000 chemical facilities, assuming appropriation of the necessary amounts. Enacting H.R. 5695 could affect direct spending and receipts because the bill would establish new civil and criminal penalties against owners and operators of chemical facilities and officers or employees of federal, state, or local government agencies who fail to comply with the bill's requirements. However, CBO estimates that any collections from such civil and criminal penalties would not be significant.

H.R. 5696 contains several intergovernmental mandates, as defined in the Unfunded Mandates Reform Act (UMRA), because it would require the owners and operators of certain facilities, including those that provide public drinking water and wastewater treatment, to submit information to the Secretary and to undertake measures to protect against the unauthorized release of chemical substances. It also would exempt certain security plans and documents from state and local laws that provide public access to information and preempt

any state or local regulation that would interfere with the security activities authorized by this bill.

Because some of the mandates are dependent upon future actions of the DHS, CBO cannot determine their exact costs. However, based on information from DHS and representatives of public water facilities, CBO estimates that, because it is likely those public facilities would be assigned to the lowest tier of risk and that DHS likely would consider activities that the facilities are currently doing to be sufficient to meet the requirements of this bill, additional costs for those public facilities would not be significant. CBO estimates that the total cost for state and local governments to comply with those security requirements and the preemptions of authority would be small and therefore would not exceed the annual threshold established in UMRA (\$64 million for intergovernmental mandates in 2006, adjusted annually for inflation).

H.R. 5695 also would impose private-sector mandates, as defined in UMRA, on owners and operators of certain chemical facilities and certain individuals affiliated with those facilities. Based on information from industry and government sources, CBO expects that the aggregate direct cost of complying with those mandates would exceed the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation) in at least one of the first five years the mandates are in effect.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 5695 is shown in the following table. For this estimate, CBO assumes that the bill will be enacted near the end of fiscal year 2006, that the necessary amounts will be appropriated for each year, and that outlays will follow historical spending patterns for similar activities. The costs of this legislation fall within budget function 750 (administration of justice).

	By Fiscal Year, in Millions of Dollars					
	2006	2007	2008	2009	2010	2011
SPENDING SUBJECT TO APPROPRIATION						
DHS Spending on Security of Chemical Sites						
Under Current Law						
Budget Authority ^a	15	0	0	0	0	0
Estimated Outlays	10	5	0	0	0	0
Proposed Changes						
Regulation Development, Review of Vulnerability Assessments, and Emergency Response Plans						
Estimated Authorization Level	0	13	1	1	1	1
Estimated Outlays	0	11	3	1	1	1
Establish Chemical Security Office and Regional Offices for Site Audits and Inspections						
Estimated Authorization Level	0	*	30	45	45	45
Estimated Outlays	0	*	30	45	45	45
Maintain Chemical Site Information						
Estimated Authorization Level	0	20	2	2	2	2
Estimated Outlays	0	18	4	2	2	2
Chemical Facility Security Training Program						
Estimated Authorization Level	0	0	5	5	5	5
Estimated Outlays	0	0	5	5	5	5
Total Proposed Changes						
Estimated Authorization Level	0	33	38	53	53	53
Estimated Outlays	0	29	42	53	53	53
DHS Spending on Security of Chemical Sites Under H.R. 5695						
Estimated Authorization Level ^a	15	33	38	53	53	53
Estimated Outlays	10	34	42	53	53	53

NOTE: * = less than \$500,000.

a. The 2006 level is the amount appropriated for DHS to address security issues at chemical facilities in that year.

BASIS OF ESTIMATE

CBO estimates that implementing this legislation would cost \$29 million in 2007 and \$230 million over the 2007-2011 period, subject to appropriation of the necessary amounts. In addition, CBO estimates that enacting H.R. 5695 could have an insignificant effect on direct spending and receipts by creating new criminal and civil penalties related to compliance with the bill's provisions.

Regulation Development and Risk Assessment

H.R. 5695 would require DHS to develop various regulations identifying facilities as chemical sources, determining the risk to the nation's security associated with those facilities, setting security performance standards for chemical facilities, and detailing the requirements for vulnerability assessments and security plans for chemical facilities. CBO estimates that implementing these provisions of the legislation would cost \$17 million over the next five years, subject to appropriation of the necessary amounts.

Based on information from DHS, CBO estimates that over the 2007-2008 period, efforts to develop necessary regulations would require about 15 staff-years at a cost of about \$2 million, and \$8 million for related contractor support for information technology, meeting and conference planning, and assistance in conducting various studies. In addition, under the bill, facilities that involve higher security risks would have to undergo a more detailed facility assessment. Currently, DHS is in the process of developing a risk assessment framework known as Risk Analysis and Management for Critical Asset Protection (RAMCAP). According to DHS, additional funding would be required to refine and manage the RAMCAP process to meet the bill's requirements for assessing risk. Based on information from DHS, CBO estimates that \$3 million in 2007 and \$1 million a year in subsequent years would be needed for additional training and technical modifications to RAMCAP to comply with requirements of H.R. 5695.

Chemical Security Office and Regional Offices

The bill would direct DHS to create a chemical security office. The new office would be responsible for planning, management, assignment of facilities to risk tiers, review and maintenance of site vulnerability assessments and plans, training of private auditors and inspectors, and enforcement. In addition, DHS expects that up to 10 field offices would be established near various clusters of chemical facilities to oversee audits and inspections of the facilities that would be conducted by both field office staff and private auditors and inspectors who have been certified and funded by DHS. Under the bill, most of the nation's

15,000 to 18,000 chemical facilities would be audited or inspected over the next 10 years. In total, CBO estimates that these efforts would cost \$165 million over the 2007-2011 period, subject to appropriation of the necessary amounts.

Based on information from DHS, CBO expects that the chemical security office would be operational by 2008 and fully staffed by 2009. We estimate that the office would require a staff of 20 with a first-year cost of about \$2 million, and would need about \$13 million for contractor support and information technology in 2008. In subsequent years, CBO estimates that \$20 million would be required, including \$5 million for a staff of 50 and \$15 million for contractor costs, travel expenses, and information technology.

According to DHS, the agency would spend less than \$500,000 in 2007 to study how the field offices should be structured to meet the requirements of this legislation. DHS would need additional resources to audit and inspect chemical facilities and to oversee large-scale emergency response exercises and to coordinate efforts with local first responders. CBO estimates that DHS would spend about \$15 million in 2008 to begin these efforts, using a staff of 35 at a cost of about \$4 million and \$11 million for contractor support, travel expenses, and information technology. After these initial efforts, we estimate that DHS would spend about \$10 million on a staff of about 100 plus \$15 million for related costs each year over the 2009-2011 period.

Maintain Chemical Site Information

Based on information from DHS, CBO estimates that DHS would need about \$20 million in 2007 to construct facilities to store the site chemical information it collects in a secure environment and to provide funding for information technology and support services for tracking such information. In subsequent years, CBO estimates that DHS would require \$2 million to provide ongoing support to maintain the site information.

Chemical Facility Security Training Program

H.R. 5695 would require DHS to establish a chemical security training program for federal, state, and local officials, operators and employees of chemical facilities, and emergency response providers. This voluntary program would include training on the preparation of facility security plans and procedures, detection of weapons and devices, and evacuation procedures.

Based on information from DHS, CBO estimates that implementing this training program would cost about \$5 million annually beginning in 2008. Such funding would cover the salaries and expenses associated with about two DHS employees and contractor costs required to run the program.

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

H.R. 5695 contains several intergovernmental mandates as defined in UMRA. First, it would require owners and operators of certain chemical facilities to undertake specific measures to protect against terrorist attacks, criminal acts, or other categories of chemical releases based on regulations to be developed by DHS. Because the sites would be selected from public and private entities (including public drinking water and wastewater treatment facilities), the bill would impose intergovernmental mandates as defined in UMRA.

The bill also contains two preemptions of state and local authority. It would exempt certain security plans and documents from state and local laws that provide public access to information and preempt any state or local regulation that would interfere with the security activities authorized by this bill.

CBO estimates that the total cost for state and local governments to comply with the security requirements and the preemptions of authority would be small and therefore would not exceed the annual threshold established in UMRA (\$64 million for intergovernmental mandates in 2006, adjusted annually for inflation).

Requirement for Vulnerability Assessments and Security Plans

H.R. 5695 would require that owners and operators of affected facilities conduct an assessment of the vulnerability of their facility, identify the hazards that may result from a substance's release, and develop and implement a security plan to prevent or respond to those releases. H.R. 5695 would further require that owners and operators certify completion of both the assessment and plan, submit copies to DHS, maintain records at the facility, and complete a periodic review of the assessment and plan.

According to government and industry representatives, many of the facilities potentially affected by the bill's provisions are currently engaged in activities similar to those that would be required under H.R. 5695. Such facilities are acting either in response to the terrorist attacks of September 11, 2001, as a condition of membership with chemical industry associations, or to comply with the Public Health Security and Bioterrorism Preparedness and

Response Act of 2002, the Maritime Transportation Security Act, or other federal regulations. The bill would exempt from these new requirements many of those public facilities, unless the Secretary determines that more security actions are necessary. Information from DHS indicates that public water facilities likely would be assigned to the lowest tier of risk and that the department likely would consider activities that the facilities are currently doing to be sufficient. Assuming public facilities would not be required to undertake significant new activities, CBO expects that these mandates would impose little additional costs on those facilities.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

H.R. 5695 would impose private-sector mandates, as defined in UMRA, on owners and operators of certain chemical facilities and certain individuals affiliated with those facilities. Based on information from industry and government sources, CBO expects that the aggregate direct cost of complying with those mandates would exceed the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation) in at least one of the first five years the mandates are in effect.

Chemical Facilities

H.R. 5695 would require the Secretary of Homeland Security to establish a list of significant chemical facilities based on criteria in the bill, and assign each such facility to one of at least four risk-based tiers. If requested by the Secretary, an owner or operator of a chemical facility on the list would be required to provide information necessary for the Secretary to assign the chemical facility to the appropriate risk-based tier. The Secretary of DHS would be required to prescribe regulations to establish security standards and procedures for facilities on the list and require the owner or operator of each chemical facility to:

- Conduct an assessment of the vulnerability of the chemical facility to a terrorist incident;
- Prepare and implement a facility security plan that addresses the results of the vulnerability assessment; and
- Consult with appropriate employees of their facility in developing the vulnerability assessment and security plan.

Those assessments and plans would be required to be completed and submitted to the Secretary no later than three years after the final regulations are issued.

The bill would require the owner or operator of a chemical facility assigned to the high-risk tier to submit a vulnerability assessment and facility security plan not later than six months after the date on which the Secretary prescribes the regulations. The owner or operator of a high-risk chemical facility also would be required to conduct a specific assessment of methods to reduce the consequences of a terrorist attack on the facility. If the Secretary determines that methods to reduce the consequences of a terrorist attack are needed, the owner or operator of the high-risk facility would be required to implement such methods.

The bill would require the owner or operator of any chemical facility on the list to maintain a current copy of the assessment and plan at the facility. The owner or operator of the chemical facility also would be required to allow the Secretary of DHS (or a designee), the right of entry to, on, or through their property for security inspections and verifications. In addition, not later than three years after an assessment or plan is required to be submitted, and at least once every five years thereafter, the owner or operator would be required to submit a review of the adequacy of the vulnerability assessment or facility security plan that includes a description of any changes made to the assessment or plan.

According to industry and government sources, a large number of facilities are currently engaged in activities similar to the types of assessments and planning that would be required under this bill. According to those sources, approximately 15,000 to 18,000 chemical facilities would be affected by the new security regulations. While the direct cost of complying with those mandates would depend on the regulations to be issued by DHS, based on information from industry and government sources, CBO expects that the incremental cost to comply with the security standards outlined in the bill would be substantial and would exceed the annual threshold established in UMRA in at least one of the first five years those requirements are in effect.

Whistleblower Protection

The bill also would prohibit an owner or operator of a chemical facility from discharging any employee, or otherwise discriminating against such employees with respect to compensation, terms, conditions, or privileges of their employment because the employee submitted a report to the Secretary regarding problems, deficiencies, or vulnerabilities at a chemical facility. Based on information from government sources, CBO estimates that the owners or operators of chemical facilities would incur minimal direct cost, if any, to comply with such protection requirements for their employees.

Restriction on Individuals Affiliated with a Chemical Facility

The bill also would impose a new mandate by prohibiting an individual from being designated to carry out certain functions under this bill with respect to any facility with which that individual was affiliated as an officer, director, or employee during the three-year period preceding the date of such designation. Based on information from industry sources, CBO estimates that the direct cost to comply with this mandate would be minimal, if any.

PREVIOUS CBO ESTIMATE

On July 25, 2006, CBO transmitted a cost estimate for S. 2145, the Chemical Facilities Anti-Terrorism Act of 2006, as ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on June 26, 2006. S. 2145 and H.R. 5695 would essentially impose the same requirements on DHS. However, S. 2145 includes a provision requiring DHS to regulate the handling and purchase of ammonium nitrate, and H.R. 5695 includes a provision requiring DHS to establish a chemical security training program. These differences are reflected in the cost estimates.

The private-sector mandates in the two bills are similar. S. 2145 would impose an additional mandate on owners or operators of certain chemical facilities by requiring them to prepare and implement an emergency response plan and would impose mandates on producers, sellers, and purchasers of ammonium nitrate that are not included in this bill. In addition, S. 2145 does not contain the restriction on certain individuals affiliated with a chemical facility.

ESTIMATE PREPARED BY:

Federal Costs: Susanne S. Mehlman

Impact on State, Local, and Tribal Governments: Melissa Merrell

Impact on the Private Sector: Paige Piper/Bach

ESTIMATE APPROVED BY:

Peter H. Fontaine

Deputy Assistant Director for Budget Analysis